

REMARKS

In the specification, the title of the present application has been amended so as to more clearly indicate the invention to which claims are directed. The new title is that which is suggested by the Examiner in the Office Action.

In amended Figure 1, additional details have been provided so as to address the objections posed by the Examiner in paragraph 3 of the Office Action.

Claims 1, 3-5, 7 and 9-11 remain in this application. Claims 2, 6, 8 and 12 have been cancelled.

In the Office Action dated November 10, 2003, the Examiner rejected, in particular, independent claims 1 and 7 of the present application under 35 U.S.C. § 103(a) as being unpatentable over Takami et al. (IEEE ICASSP 1992), in view of Whang et al. (U.S. Patent No. 6,141,641). In addition, the Examiner rejected, in particular, dependent claim 12 of the present application under 35 U.S.C. § 103(a) as being unpatentable over the above-cited references, and further in view of Phillips et al. (U.S. Patent No. 6,501,833). For the following reasons, Applicants respectfully submit that the claims of the present application, as amended, are patentable over the art of record and respectfully request that the rejections be withdrawn thereto.

Specifically, independent claims 1 and 7 have been amended so as to further clarify that the adaptation of the probability density function associated with the hidden Markov model is dynamically performed at run time; i.e., on line. Such approach is in contrast to that which is known in the prior art where speaker adaptation is employed in "post-estimating" parameter values of the hidden Markov models. This type of processing is implemented "off line" not at the actual run time of the method for speech recognition.

Applicants respectfully submit that none of the references cited by the Examiner teach or suggest such adaptation which is dynamically performed at run time. The Examiner's conclusion that the Phillips reference discloses the same type of speaker adaptation is incorrect. Indeed, the Phillips reference is merely directed to the addition of new words. Such integration of new words takes place on the symbolic level in a pronunciation network and can be done dynamically; i.e., on line. However, the present application is directed toward speaker adaptation on an acoustic level (hidden Markov models). The present invention assumes that the pronunciation of a new word is already known to the recognizing apparatus, but the hidden

Markov models (which are the basis of the words) are adaptive. Thus, Applicants respectfully submit that the "adaptation" which is disclosed in the Phillips reference is not a true adaptation at all, but rather a dynamic system for adding words to an active portion of a total vocabulary.

In light of the above, Applicants respectfully submit that the claims of the present application, as amended, are both novel and non-obvious over the art of record. Accordingly, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

It is further acknowledged that a three month extension of time of \$475.00 is due in connection with this action at this time. However, if any additional fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket no. (0112740-440) on the account statement.

Respectfully submitted,

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